

#### Scholar

Results 1 - 10 of about 59 for high electron mobility transistor thz spectrometer. (0.06 seconds)

Terahertz emission by plasma waves in 60 nm gate high electron mobility transistors - group of 3 » W Knap, J Lusakowski, T Parenty, S Bollaert, A ... - Applied Physics Letters, 2004 - univ-montp2.fr ... in GaAs-based high electron mobility transistors HEMTs and in gated double quantum ... was chosen for its high InGaAs channel mobility and high sheet carrier ... Cited by 18 - View as HTML - Web Search - BL Direct

NbN hot electron bolometric mixers-a new technology for low-noise THz receivers - group of 4 » E Gerecht, CF Musante, Y Zhuang, KS Yngvesson, T ... - IEEE Transactions on Microwave Theory and Techniques, 1999 - ieeexplore.ieee.org ... GHz, 1.56 THz, and 2.24 THz, respectively ... A liquid-helium-cooled isolator-coupled high electron- ... mobility transistor (HEMT) amplifier was employed as the first ... Cited by 15 - Web Search - BL Direct

# Voltage tuneable terahertz emission from a ballistic nanometer InGaAs / InAlAs transistor - group of 2 »

J Lusakowski - Journal of Applied Physics - link.aip.org ... emission by plasma waves in 60 nm gate **high electron mobility** transistors," Appl. ... **Electron** Devices 42, 991 (1995 ... The **transistor** magnetic field is equal to zero ... <u>Cited by 1 - Web Search</u>

# A 1-THz Superconducting Hot-Electron-Bolometer Receiver for Astronomical Observations - group of 2 »

DV Meledin, DP Marrone, CYE Tong, H Gibson, R ... - IEEE TRANSACTIONS ON MICROWAVE THEORY AND TECHNIQUES, 2004 - ieeexplore.ieee.org ... 1.046 THz and from 1.261 to 1.275 THz. ... a low-noise cryogenic high electron-mobility transistor (HEMT) amplifier ... and a digital autocorrelation spectrometer with 3 ... Cited by 1 - Web Search - <u>BL Direct</u>

# Terahertz Generation and Detection by Plasma Waves in Nanometer Gate High Electron Mobility ... - group of 3 »

W Knap, J Lusakowski, F Teppe, N Dyakonova, Y ... - univ-montp2.fr ... by using the InGaAs high electron mobility transistor with the ... Lattice-matched InGaAs/AllnAs high electron mobility transistors on ... of weak THz — cyclotron res ... View as HTML - Web Search

# Terahertz generation by plasma waves in nanometer gate high electron mobility transistors J Łusakowski, F Teppe, N Dyakonova, YM Meziani, W ... - physica status solidi(a), 2005 - doi.wiley.com ... a lattice-matched InGaAs/AllnAs High Electron Mobility Transistor (HEMT) [2 ... The transistor was placed in a cyclotron ... a spectral analysis of weak THz radiation. ... Web Search

### French Team Demonstrates Terahertz Transistor

M Electronics - ieeexplore.ieee.org
... French team used a **high electron-mobility transistor** with an ... per square centimeter, the **transistor** should be ... vices have a lower **electron mobility**, the gated ...
Web Search

#### LETTER TO THE EDITOR

F Maiwald, F Lewen, V Ahrens, M Beaky, R ... - Journal of Molecular Spectroscopy, 2000 - ph1.uni-koeln.de ... region between 1 and 1.6 **THz**, which has been ... of the Cologne terahertz **spectrometer** (13), however ... with a low-noise **high- electron mobility transistor** (HEMT) and ...



high electron mobility transistor thz spectromet

Search Scholar Search
Scholar Preferences
Scholar Help

### Scholar

Results 1 - 10 of about 21 for high electron mobility transistor thz spectrometry. (0.09 seconds)

Manufacturability of high-performance discrete electronic devices - group of 3 »

MJ Kelly - ELECTRONICS AND COMMUNICATION ENGINEERING JOURNAL, 2002 - ieeexplore.ieee.org
... The high- electron-mobility transistor, the quantum well laser, the ... high yield, high
reproducibility, high reliability, good ... level for the extra electron is at ...

Web Search - BL Direct

[воок] <u>Investigation of novel metal gate and **high**-к dielectric materials for CMOS technologies</u> - group of 2 »

J Westlinder - diva-portal.org

... for optimal performance of the **transistor** [9]. Several ... long time considered a promising **high**- candidate, but ... gate leakage current due to **electron** emission into ... Web Search

### RADIATION RESISTANCE OF GAAS-BASED MICROWAVE SCHOTTKY-BARRIER DEVICES

AE Belyaev, J Breza, EF Venger, M Vesely, VVMIV ... - isp.kiev.ua ... quantum properties (eg, **high** charge carrier **mobility** in two ... quality with such powerful methods as **high**- and low ... diffraction (HEED and LEED), Auger **electron** and x ... Web Search

<u>Design, Modeling, and Testing of High Performance RF Bistable Magnetic Actuators</u> - group of 4 » GD Gray - 2005 - etd.gatech.edu ... MOSFET Metal Oxide Semiconductor Field Effect **Transistor** MESFET Metal Semiconductor Field Effect **Transistor** HEMT **High Electron Mobility** Transistors ...

View as HTML - Web Search

Nanoscience and nanotechnology in Europe - group of 7 »

WM Tolles - NANOTECHNOLOGY, 1996 - iop.org

... spectrometry. ... A continuing program involves a pseudomorphic high-electron-mobility transistor (HEMT) (strained lattice); with this it is expected to reach 144 ... Cited by 11 - Web Search - BL Direct

## I, A \_, AS/IO. GO. AS Planar Heteroepitaxial

D Pavlidis, CH Hong - ieeexplore.ieee.org

... GaAs-based materials through higher **electron mobility** and saturation ... lower series resistance and hot **electron** noise ... low input power levels and **high** frequency of ... Web Search

#### [DOC] ARMY FY03 STTR TITLE INDEX

P SUBMITTAL - nttc.edu

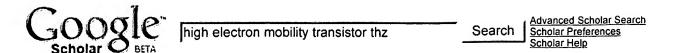
... of plasma-wave **transistor** devices (eg, based **High Electron Mobility** Transistors (HEMTs), in both the detection and generation of **THz** frequency electromagnetic ... <u>View as HTML</u> - Web Search

#### Materials modification with ion beams - group of 4 »

JS Williams - Reports on Progress in Physics, 1986 - iop.org ... collisions) but the large density of electrons and the **high** ... Sputtered target atoms Secondary ion mass **spectrometry** (SIMS) Auger **electron** spectroscopy (AES) ... Cited by 9 - Web Search

#### OPENING PLENARY - group of 4 »

MO PRESENTATIONS - Appl. Phys. Lett, 2000 - lucy.mrs.org



#### Scholar

Results 1 - 10 of about 496 for high electron mobility transistor thz. (0.02 seconds)

Terahertz emission by plasma waves in 60 nm gate high electron mobility transistors - group of 3 » W Knap, J Lusakowski, T Parenty, S Bollaert, A ... - Applied Physics Letters, 2004 - univ-montp2.fr ... voltage tunable emission of terahertz radiation 0.4–1.0 THz from a gated two-dimensional electron gas in a 60 nm InGaAs high electron mobility transistor. ... Cited by 18 - View as HTML - Web Search - BL Direct

Ultra-low-noise cryogenic high-electron-mobility transistors - group of 5 »

KHG Duh, MW Pospieszalski, WF Kopp, P Ho, AA Jabra ... - IEEE Transactions on **Electron** Devices, 1988 - ieeexplore.ieee.org

... is due to the enhancement of **electron mobility** by reduced ... gate and source contacts), and **high** transconductartce g ... For a field-ef- fect **transistor**, the minimum ... Cited by 11 - Web Search

<u>Ultra-short 25-nm-gate lattice-matched InAlAs/InGaAs HEMTs within the range of 400 GHz cutoff ... - group of 3 »</u>

Ý Yamashita, A Endoh, K Shinohara, M Higashiwaki, ... - IEEE **Electron** Device Letters, 2001 - ieeexplore.ieee.org ... HEMT, **high** elec- tron **mobility transistor**, InAlAs/InGaAs ... wave (300 GHz to 3 **THz**) frequency ranges ... based InAlAs/In- GaAs **high electron mobility** transistors (HEMTs ... <u>Cited by 22 - Web Search - BL Direct</u>

Resonant detection of subterahertz radiation by plasma waves in a submicron field-effect transistor - group of 3 »

W Knap, Y Deng, S Rumyantsev - Applied Physics Letters, 2002 - univ-montp2.fr ... de- tection by two-dimensional **electron** plasma confined ... a 0.15 m gate length GaAs field-effect **transistor**. ... possibility of achieving, in **high mobility** GaAs FETs ... Cited by 16 - View as HTML - Web Search - BL Direct

Large bandwidth and low noise in a diffusion-cooled hot-electron bolometer mixer - group of 6 »

A Skalare, WR McGrath, B Bumble, HG LeDuc, PJ ... - Applied Physics Letters, 1996 - nano.ece.uci.edu
... electron-electron elastic scattering time, which is 160 THz for a ... A cooled high electron
mobility transistor HEMT amplifier with an isolator was used as the ...

Cited by 19 - View as HTML - Web Search - BL Direct

NbN hot electron bolometric mixers-a new technology for low-noise THz receivers - group of 4 » E Gerecht, CF Musante, Y Zhuang, KS Yngvesson, T ... - IEEE Transactions on Microwave Theory and Techniques, 1999 - ieeexplore.ieee.org

... GHz, 1.56 THz, and 2.24 THz, respectively ... A liquid-helium-cooled isolator-coupled high electron- ... mobility transistor (HEMT) amplifier was employed as the first ... Cited by 15 - Web Search - BL Direct

2. 5-THz GaAs monolithic membrane-diode mixer - group of 4 »

PH Siegel, RP Smith, MC Gaidis, SC Martin - IEEE Transactions on Microwave Theory and Techniques, 1999 - ieeexplore.ieee.org

... B. Diode and Membrane Fabrication The 2.5-**THz** mesa air-bridge T ... trilayer resist process as is com- monly used for **high electron-mobility transistor** (HEMT) or ... <u>Cited by 30 - Web Search</u> - <u>BL Direct</u>

<u>Plasma and transit-time mechanisms of the terahertz radiation detection in **high-electron-mobility** ... - group of 6 »</u>

A Satou, I Khmyrova, V Ryzhii, MS Shur - Semiconductor Science and Technology, 2003 - iop.org ... in field-effect-transistor structures with high electron mobility can be used for



high electron mobility transistor terahertz modu Search

Search Scholar Search Scholar Preferences Scholar Help

Scholar

Results 1 - 10 of about 204 for high electron mobility transistor terahertz modulation. (0.02 seconds)

Terahertz emission by plasma waves in 60 nm gate high electron mobility transistors - group of 3 » W Knap, J Lusakowski, T Parenty, S Bollaert, A ... - Applied Physics Letters, 2004 - univ-montp2.fr

... chosen for its high InGaAs channel mobility and high ... the effective electric field in the high field region ... waves in the gated two-dimensional electron system. ...

Cited by 18 - View as HTML - Web Search - BL Direct

Terahertz sources and detectors using two-dimensional electronic fluid in high electron-mobility ... - group of 3 »

MS Shur, JQ Lu - IEEE Transactions on Microwave Theory and Techniques, 2000 - ieeexplore.ieee.org ... However, the **modulation** of the **electron** sheet ... Weikle II, "A resonant **terahertz** detector utilizing a **high electron mobility transistor**," in IEDM ...

Cited by 3 - Web Search - BL Direct

by Two-Dimensional Electronic Fluid - group of 2 »

M Dyakonov, M Shur - IEEE TRANSACTIONS ON **ELECTRON** DEVICES, 1996 - ieeexplore.ieee.org ... Abstract-We show that a short channel **High Electron Mobility Transistor** (HEMT) has a resonance ... currently used as detectors and mixers in the **terahertz** range. ... Cited by 19 - Web Search - BL Direct

...: Terahertz Sources and Detectors Using Two Dimensional Electronic Fluid in High Electron Mobility ... - group of 2 »

MS Shur, JQ Lu, MI Dyakonov - Terahertz Electronics Proceedings, 1998. THz Ninety Eight. ..., 1998 - ieeexplore.ieee.org

... can be utilized for **terahertz** detectors, broad ... us consider an AlGaAslInGaAs **High Electron Mobility Transistor** similar to ... Once the **electron** velocity exceeds the ... Cited by 2 - Web Search

... AND CUTOFF FREQUENCY OF PSEUDOMORPHIC () AlGaAs/InGaAs MODULATION-DOPED

FIELD-EFFECT TRANSISTOR FOR - group of 3 »

C APPLICATIONS - MICROWAVE AND OPTICAL TECHNOLOGY LETTERS, 1999 - doi.wiley.com ... wave, submillimeter-wave, and **terahertz** range cir ... of a pseudomorphic AlGaAsr InGaAs **modulation**-doped field ... The **high-electron-mobility transistor** HEMT is a very ... Cited by 4 - Web Search - BL Direct

Terahertz plasma wave resonance of two-dimensional electrons in InGaP/InGaAs/GaAs high-electron- ... - group of 2 »

T Otsuji, M Hanabe, O Ogawara - Applied Physics Letters, 2004 - osti.gov ... resonant intensity in the **terahertz** range for a ... length InGaP/InGaAs/GaAs pseudomorphic **high-electron-mobility transistor**. ... and a moderate **modulation** index (the ... Cited by 2 - Cached - Web Search - BL Direct

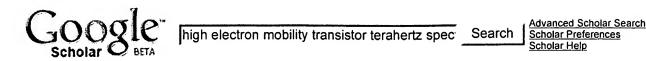
Noise performance of the radio-frequency single-electron transistor - group of 4 »

L Roschier, P Hakonen, K Bladh, P Delsing, KW ... - JOURNAL OF APPLIED PHYSICS, 2004 - boojum.hut.fi
... RF-SET systems, the second amplifier high-electron-mobility transistor HEMT sets ...
with a period of one electron charge, e ... high resistance 50–200 k of the SET ...
Cited by 7 - View as HTML - Web Search - BL Direct

Low ballistic mobility in submicron HEMTs - group of 4 »

MS Shur - IEEE Electron Device Letters, 2002 - ieeexplore.ieee.org ... [7] M. Dyakonov and MS Shur, "Ballistic transport in high mobility semi- conductor ...

... [7] M. Dyakonov and MS Shur, "Ballistic transport in **high mobility** semi- conductor ... at low-temperatures for low power **high** speed logic ... **Electron** Devices, vol. ...



Scholar Results 1 - 10 of about 59 for high electron mobility transistor terahertz spectrometer. (0.08 seconds)

Terahertz emission by plasma waves in 60 nm gate high electron mobility transistors - group of 3 » W Knap, J Lusakowski, T Parenty, S Bollaert, A ... - Applied Physics Letters, 2004 - univ-montp2.fr ... chosen for its high InGaAs channel mobility and high ... the effective electric field in the high field region ... waves in the gated two-dimensional electron system ... Cited by 18 - View as HTML - Web Search - BL Direct

# Magnetic field effect on the terahertz emission from nanometer InGaAs/AllnAs high electron mobility ... - group of 2 »

N Dyakonova, F Teppe, J Łusakowski, W Knap, M ... - JOURNAL OF APPLIED PHYSICS, 2005 - univ-montp2.fr ... spectral analysis of the weak terahertz radiation. 10 The spectrometer consisted of two superconducting ... The high electron mobility transistor HEMT and detector ... Cited by 1 - View as HTML - Web Search

# Voltage tuneable terahertz emission from a ballistic nanometer InGaAs / InAlAs transistor - group of 2 »

J Lusakowski - Journal of Applied Physics - link.aip.org ... for a ballistic field effect transistor. New mechanism ... in 60 nm gate high electron mobility transistors," Appl. ... of sub-terahertz and terahertz radiation by ... Cited by 1 - Web Search

# Terahertz Generation and Detection by Plasma Waves in Nanometer Gate High Electron Mobility

... - group of 3 » W Knap, J Lusakowski, F Teppe, N Dyakonova, Y ... - univ-montp2.fr ... The terahertz emission (0.4-1.0 THz ... by using the InGaAs high electron mobility transistor with the ... matched InGaAs/AllnAs high electron mobility transistors on ... View as HTML - Web Search

# Terahertz generation by plasma waves in nanometer gate high electron mobility transistors

J Łusakowski, F Teppe, N Dyakonova, YM Meziani, W ... - physica status solidi(a), 2005 - doi.wiley.com ... that allows determining average electron mobility in the ... the transistor does not contribute essentially to the ... At high magnetic fields, Shubnikov-de Haas ... Web Search

# Miniature quantum-well microwave spectrometer operating at liquid-nitrogen temperatures - group of 2 »

IV Kukushkin - Applied Physics Letters - link.aip.org ... 187-207. J.-QLu and MS.Shur, "Terahertz detection by high-electron-mobility transistor: Enhancement by drain bias," Appl. Phys. Lett. 78, 2587 (2001). ... Web Search

## French Team Demonstrates Terahertz Transistor

M Electronics - ieeexplore.ieee.org ... French team used a high electron-mobility transistor with an ... vices have a lower electron mobility, the gated ... demonstration showing that the transistor emits at ... Web Search

#### LETTER TO THE EDITOR

F Maiwald, F Lewen, V Ahrens, M Beaky, R ... - Journal of Molecular Spectroscopy, 2000 - ph1.uni-koeln.de ... essentially a modified version of the Cologne terahertz spectrometer (13), however ... and amplified with a low-noise high- electron mobility transistor (HEMT) and ... Web Search



high electron mobility transistor terahertz modu Search

Advanced Scholar Search Scholar Preferences

Scholar Results 1 - 10 of about 31 for high electron mobility transistor terahertz modulation spectrometer. (0.08

<u>Terahertz emission by plasma waves in 60 nm gate high electron mobility transistors - group of 3 »</u> W Knap, J Lusakowski, T Parenty, S Bollaert, A ... - Applied Physics Letters, 2004 - univ-montp2.fr ... chosen for its high InGaAs channel mobility and high ... the effective electric field in the high field region ... waves in the gated two-dimensional electron system. ... Cited by 18 - View as HTML - Web Search - BL Direct

## Terahertz Generation and Detection by Plasma Waves in Nanometer Gate High Electron Mobility ... - group of 3 »

W Knap, J Lusakowski, F Teppe, N Dyakonova, Y ... - univ-montp2.fr ... Lattice-matched InGaAs/AllnAs high electron mobility transistors on InP ... under the gate, by the electron drift velocity, and ... still holds and a high field region ... View as HTML - Web Search

## BUDKER INSTITUTE OF NUCLEAR PHYSICS SB RAS - group of 4 »

T RADIATION, LD PUBLICATIONS - inp.nsk.su ... using two-dimensional electronic fluid in high electron-mobility transistors. ... The project of high power submtllimetr-wavelength free electron laser ...

View as HTML - Web Search

#### Volume

GAE Vandenbosch - ieeexplore.ieee.org ... Laser-microwave spectrometer for investigation of AI and Au ... Time-domain analysis of high-Q field oscillations ... 9. Two-stream instabilities of electron-hole solid ... Web Search

#### Volume

MP Vasilevskiy, IA Grande, ACL Cubeceira, I Barba, ... - ieeexplore.ieee.org ... Laser-microwave spectrometer for investigation of AI and Au ... Time-domain analysis of high-Q field oscillations ... 9. Two-stream instabilities of electron-hole solid ... Web Search

# High-Speed and High-Output InP-InGaAs Unitraveling-Carrier Photodiodes - group of 2 »

H Ito, S Kodama, Y Muramoto, T Furuta, T Nagatsuma ... - IEEE Journal of Selected Topics in Quantum Electronics, 2004 - ieeexplore.ieee.org

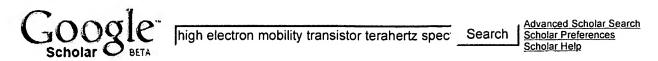
... However, the electron diffusion velocity in the InGaAs ... due to the uniquely large minority mobility of electrons ... to attain an extremely high without sacrificing ... Cited by 6 - Web Search - BL Direct

## The structure of carbodiimide, HNCNH - group of 3 »

W JABS - Molecular Physics, 1999 - Taylor & Francis ... a low-noise HEMT (high-elec- tron mobility transistor) ampli® er ... The power output of the high frequency BWO is ... onto a He- cooled InSb hot-electron bolometer. ... Cited by 3 - Web Search - BL Direct

# A 240–380 GHz millimetre wave source for very high resolution spectroscopy of high Rydberg states - group of 2 »

M Schafer, M Andrist, H Schmutz, F Lewen, G ... - J. Phys. B: At. Mol. Opt. Phys, 2006 - iop.org ... photoacoustic power meter (TeraHertz absolute power ... matched low-noise high electron mobility transistor (HEMT) amplifier [25 ... spectroscopy of high Rydberg states ... Web Search



Scholar Results 1 - 10 of about 136 for high electron mobility transistor terahertz spectroscopy. (0.08 seconds)

Terahertz Detector Utilizing Two-Dimensional Electronic Fluid - group of 2 »

JQ Lü, MS Shur, JL Hesler, L Sun, R Weikle - IEEE Electron Device Letters, 1998 - ieeexplore.ieee.org
... for a ballistic field effect transistor. ... frequency multiplication of Terahertz radiation
by ... electronic fluid in high electron mobility transistors," Electron ...

Cited by 6 - Web Search - BL Direct

Terahertz imaging using an interferometric array - group of 5 »

JF Federici, D Gary, B Schulkin, F Huang, H Altan, ... - APPLIED PHYSICS LETTERS, 2003 - physics.njit.edu ... mechanism of Terahertz photomixing in high-electron mobility transistor under interband ... of substrate-lens design in terahertz time-domain spectroscopy ...

Cited by 8 - View as HTML - Web Search - BL Direct

A Resonant Terahertz Detector Utilizing a High Electron Mobility Transistor I Uis, I Introduction, IIE Procedure - ieeexplore.ieee.org

... analogy for a wallistic field effect **transistor**. ... frequency multiplication of **terahertz** radiation by ... fluid in **high electron mobility** transistors", Electronics ... Cited by 1 - Web Search - BL Direct

Large bandwidth and low noise in a diffusion-cooled hot-electron bolometer mixer - group of 6 » A Skalare, WR McGrath, B Bumble, HG LeDuc, PJ ... - Applied Physics Letters, 1996 - nano.ece.uci.edu ... A cooled high electron mobility transistor HEMT amplifier with an isolator ... by fluctuations in the electron temperature, 11 ... and a Connecticut High Tech- nology ... Cited by 19 - View as HTML - Web Search - BL Direct

NbN hot electron bolometric mixers-a new technology for low-noise THz receivers - group of 4 » E Gerecht, CF Musante, Y Zhuang, KS Yngvesson, T ... - IEEE Transactions on Microwave Theory and Techniques, 1999 - ieeexplore.ieee.org ... such coatings in the terahertz range becomes ... A liquid-helium-cooled isolator-coupled high electron- ... mobility transistor (HEMT) amplifier was employed as the ... Cited by 15 - Web Search - BL Direct

# Voltage tuneable terahertz emission from a ballistic nanometer InGaAs / InAlAs transistor - group of 2 »

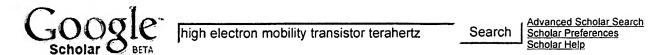
J Lusakowski - Journal of Applied Physics - link.aip.org ... for a ballistic field effect **transistor**: New mechanism ... VV.Popov, and MS.Shur, "**Terahertz** emission by ... in 60 nm gate **high electron mobility** transistors," Appl ... Cited by 1 - Web Search

# Response Properties at 2.525 **Terahertz** using **High-**T, Josephson Junctions on Silicon Bicrystal ... - group of 3 »

J Chen, E Kobayashi, K Nakajima, T Yamashita, S ... - IEEE Trans. Appl. Superconduct, 1999 - ieeexplore.ieee.org ... Spectroscopy operating up to terahertz (THz) wave ... Spectroscopy using high-Tc Josephson junctions ... a cooled low-noise high electron mobility transistor (HEMT) IF ... Cited by 1 - Web Search - BL Direct

# ... -edge broadened magneto-optic-polar-Kerr-effect-based broadband incoherent detection of terahertz ...

A De - Applied Physics Letters - link.aip.org ... Lu and MS.Shur, "Terahertz detection by high-electron-mobility transistor: Enhancement by ... Far-infrared time-domain spectroscopy with terahertz beams of ... Web Search



## Scholar

Results 1 - 10 of about 468 for high electron mobility transistor terahertz. (0.08 seconds)

Terahertz emission by plasma waves in 60 nm gate high electron mobility transistors - group of 3 » W Knap, J Lusakowski, T Parenty, S Bollaert, A ... - Applied Physics Letters, 2004 - univ-montp2.fr ... voltage tunable emission of terahertz radiation 0.4–1.0 THz from a gated two-dimensional electron gas in a 60 nm InGaAs high electron mobility transistor. ... Cited by 18 - View as HTML - Web Search - BL Direct

<u>Shallow water analogy for a ballistic field effect transistor: New mechanism of plasma wave ...</u> - group of 3 »

M Dyakonov, M Shur - PHYSICAL REVIEW LETTERS, 1993 - link.aps.org ... terahertz frequencies which may lead to impor- tant practical applications. As an example, let us consider an AlGaAs/InGaAs high electron mobility transistor ... Cited by 44 - Web Search - BL Direct

Plasma mechanism of terahertz photomixing in high-electron mobility transistor under interband ... - group of 2 »

V Ryzhii, I Khmyrova, A Satou, PO Vaccaro, T Aida, ... - Journal of Applied Physics, 2002 - adsabs.harvard.edu Title: Plasma mechanism of **terahertz** photomixing in **high-electron mobility transistor** under interband photoexcitation Authors: Ryzhii, V.; Khmyrova, I.; Satou ... <u>Cited by 4 - Web Search - BL Direct</u>

Plasma wave electronics: novel terahertz devices using two dimensional electron fluid - group of 2 » MI Dyakonov, MS Shur - Electron Devices, IEEE Transactions on, 1996 - ieeexplore.ieee.org ... how the propagation of plasma waves in a High Electron Mobility Transistor (HEMT) can be used to implement a new generation of terahertz devices, including ... Cited by 17 - Web Search - BL Direct

Detection of microwave radiation by electronic fluid in high electron mobility transistors - group of 3

© Srv - ELECTRONICS LETTERS, 1996 - ieeexplore.ieee.org
... in a reso- nance mode with **high** peak responsivity ... length, p is the channel **electron**mobility, is the ... water analogy for a balliistic field effect **transistor**. ...
Cited by 9 - Web Search - BL Direct

Terahertz photomixing in quantum well structures using resonant excitation of plasma oscillations - group of 2 »

V Ryzhii, I Khmyrova, M Shur - Journal of Applied Physics, 2002 - link.aip.org ... well diode and **transistor** structures with **high electron mobility**. This effect provides a new mechanism for the generation of tunable **terahertz** radiation using ... Cited by 9 - Web Search - BL Direct

... barrier-injection transit-time mechanisms of terahertz plasma instability in high-electron mobility ... - group of 5 »

V Ryzhii, M Shur - Semiconductor Science and Technology, 2002 - iop.org ... two-dimensional (2D) **electron** channel akin to a **high-electron mobility transistor** (HEMT) have ... system is a promising candidate for generating **terahertz** radiation ... <u>Cited by 4 - Web Search - BL Direct</u>

# Plasma and transit-time mechanisms of the **terahertz** radiation detection in **high-electron-mobility** ... - group of 6 »

A Satou, I Khmyrova, V Ryzhii, MS Shur - Semiconductor Science and Technology, 2003 - iop.org ... Abstract. We develop a device model for a high-electron-mobility transistor